

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.:	)
	)
Filing Date:	)
	)
Applicant(s):	Guoming G. Zhu
	)
Group Art Unit:	)
	)
Title:	An Ionization Detection
	System Architecture To
	Minimize PCM Pin Count
	)
Attorney Docket:	46107-0068

**INFORMATION DISCLOSURE STATEMENT**

Commissioner For Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, the references listed on the enclosed Form PTO-1449 are submitted for consideration by the Examiner in the examination of the above-identified patent application.

The full consideration of the references in their entirety by the Examiner is respectfully requested and encouraged. Also, it is respectfully requested that the references be entered into the record of the present application and that the Examiner place his or her initials in the appropriate area on the enclosed Form PTO-1449, thereby indicating the Examiner's consideration of each of the references.

The submission of the references listed on the Form PTO-1449 is for the purpose of providing a complete record and is not a concession that the references listed thereon are prior art to the invention claimed in the patent application.

Further, the submission of the references is not to be taken as a concession that any reference represents art that is relevant or analogous to the claimed invention. Accordingly, the right to argue that any reference is not properly within the scope of prior art relevant to an examination of the claims in the above-identified application is also expressly reserved.

The Information Disclosure Statement is being filed:

- ☒ (a) within three months of the filing date of the patent application, (b) within three months of the date of entry into the national stage as set forth in 37 C.F.R. § 1.491 of the international application, or (c) before the mailing date of a first Office Action on the merits.
- ☐ **after** (a), (b), or (c) above, but before the mailing date of a final action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, and includes:
  - ☐ the Certification under 37 C.F.R. § 1.97(e) (see "Certification" below).
  - ☐ the fee of \$240 set forth in 37 C.F.R. § 1.17(p) (see "Fees" below).
- ☐ **after** the mailing date of a final action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, and includes the Certification under 37 C.F.R. § 1.97(e) (see "Certification" below), a Petition requesting consideration of the Information Disclosure Statement (see "Petition" below), and the Petition Fee set forth in 37 C.F.R. § 1.17(i) (see "Fees" below).

**Copies Of The References**

- ☒ Copies of the references listed on the enclosed Form PTO-1449 are enclosed herewith. Attached to each reference not in the English language is a concise explanation of the relevance pursuant to 37 C.F.R. § 1.98(a)(3).
- ☐ A copy of the foreign search report is enclosed herewith.
- ☐ The references listed on the enclosed Form PTO-1449 were previously identified in the parent application(s) of the present application, and copies of the references were furnished at that time. Accordingly, additional copies of the references are not submitted herewith, so as not to burden the file with duplicate copies of references. The Examiner is respectfully requested to carefully review the references in accordance with the requirements set out in the Manual of Patent Examining Procedure. In accordance with 37 C.F.R. § 1.98(d), the details of the parent application(s) relied upon for an earlier filing date under 35 U.S.C. § 120 in which copies of the references were previously furnished are set out below:

In re Appln. of Guoming G. Zhu  
Attorney Docket: 46107-0068

U.S. APPLICATIONS		Status ( <i>check one</i> )		
U.S. APPLICATIONS	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
1. 0 /				
2. 0 /				
3. 0 /				

### Other Applications

- ☒ The Examiner's attention is directed to the following U.S. patent application(s) (submitted herewith is a copy of each application specification including the claims, and any drawing of the application, or that portion of each application which caused it to be listed including any claims directed to that portion):

U.S. APPLICATIONS		Status ( <i>check one</i> )		
U.S. APPLICATIONS	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
1.10 /458,627	June 11, 2003		X	
2. 0 /				
3. 0 /				

### Certification

- ☐ The **undersigned attorney** hereby certifies that each item of information contained in the Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of the Information Disclosure Statement.
- ☐ The **undersigned attorney** hereby certifies that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application or, to the knowledge of the attorney signing after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of the Information Disclosure Statement.

In re Appln. of Guoming G. Zhu  
Attorney Docket: 46107-0068

**Petition**

- ☐ The undersigned attorney hereby petitions the Commissioner to consider this Information Disclosure Statement and the references listed on the enclosed Form PTO-1449 in the examination of the above-identified patent application.

**Fees**

- ☒ No fee is owed by the applicant(s).

**Authorization To Charge Additional Fees**

- ☒ If any additional fees are owed in connection with this communication, please charge Deposit Account No. 04-1061.

Respectfully submitted,

DICKINSON WRIGHT PLLC

Date: August 5, 2003

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DAM/gmp

<b>FORM PTO-1449</b>  <b>INFORMATION DISCLOSURE</b> <b>CITATION</b> <b>(modified)</b>		Atty D cket: 46107-0068		Serial No.:	
		Applicant: Guoming G. Zhu			
		Filing Date:		Group:	

  

U.S. PATENT DOCUMENTS							
Examiner Initial		Document Number	Date	Name	Class	Sub-Class	Filing Date
		4,444,172	04/1984	Sellmaier et al.	123	425	
		5,054,461	10/1991	Deutsch et al.	123	609	
		5,309,888	05/1994	Deutsch et al.	123	609	
		5,377,484	01/1995	Shimizu	60	276	
		5,777,216	07/1998	Van Duyne et al.	73	116	
		6,123,057	09/2000	Goras et al.	123	406.2	
		6,138,653	10/2000	Juffinger	123	598	
		6,185,500 B1	02/2001	Ketterer et al.	701	111	
		6,246,952 B1	06/2001	Honda	701	111	
		6,492,818 B1	12/2002	Downs	324	382	

  

FOREIGN PATENT DOCUMENTS								
Examiner Initial		Document Number	Date	Country	Class	Sub-Class	Translation Yes   No	
		60-98171	06/1985	Japan				X
		2-16367	01/1990	Japan				X
		6-193534	07/1994	Japan				X

  

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)	
	Copy of U.S. Application Serial No. 10/458,627, filed June 11, 2003, entitled " A Method For Reducing Pin Count Of An Integrated Ignition Coil With Driver And Ionization Detection Circuit By Multiplexing Ionization And Coil Charge Current Feedback Signals," to Zhu et al. (123 pages).

Examiner:	Date Considered:
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	